

APPENDIX A

ABBREVIATIONS

APPENDIX A

A.1 ACRONYMS

AAP	Attack Assessment Program
ADP	Automated Data Processing
AOR	area of operation
ASCII	American Standard Code for Information Interchange
BCN	Base Complex Number
CEF	Civil Engineering Files
CESP	Civil Engineering Support Plan
CESPG	Civil Engineering Support Plan Generator
CINC	Commander-in-Chief
COA	course of action
COE	Common Operating Environment
COTS	Commercial Off-The-Shelf
CSM	Computer System Manual
CYST CD	Country/State Code
DESU	Deployed Eng Sensitive Unit
DOD	Department of Defense
DSSO	Defense Systems Support Organization
GCCS	Global Command and Control System
GEO	GEOLOC
GEOLOC	geographical locations
GUI	graphical user interface
HN	Host Nation
HNS	Host Nation Support
IAW	In Accordance With
JDSSC	Joint Data Systems Support Center
JEPES	Joint Engineer Planning and Execution System
JOPES	Joint Operation Planning and Execution System
JOPS	Joint Operation Planning System
JS	Joint Staff
LAD	Latest Arrival Date
LOGSAFE	Logistics Sustainment Analysis and Feasibility Estimator
LSA	Logistics Sustainability Analysis
MB	megabyte
M-Day	Mobilization Day
MTONS	Measurement Tons
NUC	Non-Unit Cargo
OPLAN	Operation Plan
PAX	Passengers
PC	personal computer
PL	Procedural Language
POD	Port of Debarkation
POE	Port of Embarkation
POL	petroleum, oil and lubricants
RCD	Required Completion Date

RDBMS	Relational Database Management System
RPI	Real Property Inventory
S&M	scheduling and movement
SIPRNET	Secret Internet Protocol Router Network
SQL	Structured Query Language
STONS	Short Tons
TDBM	Technical Database Manager
TOE	Table of Organization and Equipment
TOTPOP	Total Population
TPFDD	Time-Phased Force and Deployment Data
TUCHA	Type Unit Characteristics
TUG	Terminal Users Guide
UIC	Unit Identification Code
ULC	Unit Level Code
ULN	Unit Line Number
UM	Users Manual
U.S.	United States
UTC	Unit Type Code
WWMCCS	Worldwide Military Command and Control System

A.2 Screen Terms

The following identifies the abbreviated terms used when running JEPES.

ALT CNSTR SERV	Alternate Constructing Service
ALT PROJ TYPE	Alternate Project Type
ASSETHN	Asset Host Nation
ASSET SRC IND	Asset Source Indicator
ASSETUS	Asset U.S.
ASSETWAR	Asset and War Damage Factor
AUST. CMPT	Austere Component
BACKUP	Back-Up Supply
BASEFAC	Base Facility
BASFCCPY	Base Facility Construction Policy
BCKUPSUP	Back-Up Supply
BCMPLOC	Base Complex Location
BSE-CMPLX-NBR	Base Complex Number
BSE DOD CMP FAC NBR CAT	Base DOD Component Facility Number Category
CARGO AGG. PD SEQ NO	Cargo Aggregation Period Sequence Number
CESPG	Civil Engineering Support Plan Generator
CLIM FIRS FLAG	Climatic Factors Flag
CMPT	Component Definition
CNTRY CD OF ORIGIN	Country Code of Origin
COMP	Component
COMPEXC	Component Exception Period
CONSTRNG SERV	Constructing Service
CONTR.AFFIL.	Contractor Affiliation
CONTR ENG PRTY	Contractor Engineering Priority Code
CYST-CD	Country/State Code
DELAY DYS REQ	Delay Days Required
DEPENG	Deployed Engineering Unit
DESTLOC	Destination Location
DMND COMPLN DATE	Demand Completion Date
DOD_FAC_CAT_CD	DOD Facility Category Code
ECAPB	Service Engineering Unit Capability
END OF ANAYS PD	End-of-Analysis Period
ENGNG FORCE UTILZN INDR	Engineering Force Utilization Indicator Code
ENGNG RSRC SEQ	Engineering Resource Sequence Number
ENGSUP	Engineering Support
ENGUNCA	Engineering Unit Capability
EQUPLFC	Equipment Planning Factor
FAC	Facility
FACCAT	Facility Category
FACCOMP	Facility Component
FACILITY CAT CD	Facility Category Code
FACOMPNT	Facility Component
FAC PROJ CL	Facility Project Class

FAC PROJ CLASS	Facility Project Class
FAC PRTY SEQ NO	Facility Priority Sequence Number
FAC PRTY TYPE	Facility Priority Type
FACREQ	Facility Requirements
FALTCD	Facility Category Code
FCCTSUB	Facility Category Substitute
FOLLOW_ON_CONSTRNG_SERV	Follow-on Constructing Service Code
GEOLOC_CD	Geographic Location Code
GNRLPLFC	General Planning Factor
HN	Host Nation
HNASSET	Host Nation Asset
HN/CNTTR ENG AVAIL	Host Nation/Contractor Engineer Available
MAX AVAIL MNHRS/DAY	Maximum Available Man Hours Per Day
MAX. FAC. QUANTITY	Maximum Facility Quantity
MNHR CPBLTY	Man Hour Capability
MTONS	Measurement Tons
NBR OF CMPNTS	Number of Components
NON-COMB-POP	Noncombatant Population
NUC	Non-Unit Cargo
OPLAN	Operation Plan
ORIGLOC	Originating Location
PCT	Percent
PLANG FACTOR ECH.	Planning Factor Echelon
PLANG FAC TYPE	Planning Factor Type
PLFACPOL	Plan Facility Construction Policy
PLFCCN	Plan Facility Construction Policy
PLNINPRE	Planner Input Requirement
PLNGFACT	Planning Factors
PLNGFCTR	Planning Factors
POD	Port of Debarkation
POE	Port of Embarkation
SERV-COMP CODE	Service Component Code
SERVCOMP CD	Service Component Code
START OF ANAYS PD	Start of Analysis Period
STONS	Short Tons
SUPP.STR.INDEX	Support Structure Index
TPFDD	Time-Phased Force Deployment Data
TUCHA	Type Unit Characteristics
UNIT-ALLOC-CONSTRN	Unit Allocated Construction
UNITEQUI	Unit Equipment
UNIT_VEHI	Unit Vehicle
UIC	Unit Identification Code
ULC	Unit Level Code
UOM	Unit of Measure
UTC	Unit Type Code
WARDAMHN	War Damaged Factor Host Nation

APPENDIX B

TERMS

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TERMS

Asset	The JCS category code aggregation of real property at a base complex.
Austere Component	The smallest component to satisfy a requirement.
Base Complex	A group of geographically related installations mutually supportive of a single operational mission, developed by planner review of designated geographical locations (GEOLOC), and the existing base facilities at those locations.
Beddown Project	The most expedient means of satisfying a facility requirement.
Component	Specified materials and manhours (by horizontal, vertical, and other skill types) used in the construction of facilities.
C-DAY	The day deployment movement begins.
Emergency Repair	Temporary repairs necessitated by war damage to facilities. Performed the day on which war damage occurs and required restoration according to a date specified on the Component file.
Follow-on Project	Project to permanently replace a beddown project or to restore an emergency repair project.
Geoloc	Geographic location of a facility asset or unit destination.
H-DAY	The day hostilities start.
Horizontal Engineer	Engineer responsible for constructing horizontal objects such as roads, railroads, runways, and bridges.
JEPES_PRINT_KEEP	A UNIX environment variable used to define whether files printed by JEPES should be kept after printing or deleted. Acceptable values are: K or k -- Keep D or d -- Delete
JEPES_USER_DIR	A UNIX environment variable used to define the directory path where the JEPES user's subdirectories and files are located.
New Construction	New Facility built to satisfy a requirement necessary for an arriving or in theater unit.

Non-Unit Cargo	The equipment and supplies requiring transportation to an area of operations, other than those identified as the unit equipment or accompanying supplies of a specific unit.
Measurement Tons	The volume or cubical space of a component.
Planning Factor	Amount of specific facility (or utility service) to be provided per person, base, vehicle, aircraft, or other unit of measure.
Project	A facility construction or repair task resulting from an insufficient level of an available facility asset on a specific base.
Requirement	Necessity for a facility. May be totally or partially satisfied by an existing facility. An unsatisfied requirement is converted to a project by the assignment of an appropriate component.
Restoration Project	Permanent repairs to a war-damaged facility.
Short Tons	The actual weight of a component.
Unit Type Code	Categorizes the types of units that compose the OPLAN force list.
Vertical Engineer	Engineer responsible for constructing vertical objects such as buildings and towers.

APPENDIX C

ERROR MESSAGES

APPENDIX C

ERROR MESSAGES

There are many error messages generated by the JEPES Ada software. An attempt is made to list some of these errors and a possible method of action to solving the problem. The solutions provided can be only a guide, since only the user would know what data and options were used and could better understand what course of action to take. As mentioned in Paragraph 5.4, Recovery from errors, malfunctions and emergencies, the errors listed are in the errors file only and would be the first error that gets logged. The remaining errors are the same error being propagated up through the Ada code. Paragraph 5.4 contains some examples of error files and more information concerning error and warning messages.

Note: Many errors would be considered “internal error messages and should not normally be issued.” For these errors, a user should contact the GMC-Pentagon Help Desk. The Help Desk may be contacted at:

DSN Voice	225-0671	Comm Voice	(703)695-0671
DSN Fax	224-9082	Comm Fax	(703)614-9082
Dsn Fax (Secret)	225-0025	Comm Fax (Secret)	(703)695-0025

Home Page	http://nmcc20a.nmcc.smil.mil
email (internet)	gccshelp@ncr.disa.mil
email (sipernet)	dj9help1@nmcc20a.nmcc.smil.mil
GCCS News Group	nmcc.local.help

Errors have been divided into general and specific categories. Specific errors will tell the user such information as which table and/or element is in error. General errors state that a table (or file, etc.) is in error but does not state the table name. However, error messages list the name of the Ada routine where the error had occurred. This information **may** help the user. For example, Figure 5.4-1 shows Operation_View as the Ada routine where the error first occurred. Therefore, the error is with the Operation table.

Note: Database Analysis function should be executed before running Requirements Generation and other JEPES functions. This will reduce/eliminate some of the following errors.

GENERAL ERRORS

Undefined Errors:

1. Undefined Processing Error
Internal error message and should not normally be issued.

File Errors:

1. Data Value Error
 Error accessing a JEPES database table. Check tables's data.
2. Error Could Not Be Logged In Error File
 Internal error message and should not normally be issued.
3. File Device Error
 Internal error message and should not normally be issued.
4. File Is Already Open
 Internal error message and should not normally be issued. Cancel job and rerun.
5. File Is Not Open
 Internal error message and should not normally be issued. Cancel job and rerun.
6. File Usage Error
 Internal error message and should not normally be issued.
7. Filename Is Invalid
 Internal error message and should not normally be issued.
8. Improper Usage of Procedure
 Internal error message and should not normally be issued.
9. Incorrect Usage of Function, Check Precondition
 Internal error message and should not normally be issued.
10. Insufficient Memory
 Storage error while retrieving information from a JEPES table. PC may not have sufficient memory to access the JEPES table. While at the DOS prompt, type "MEM" to determine the PC's available memory. JEPES needs a minimum of 517 kb of memory to run. To increase memory, a user can remove extraneous background programs. Also, refer to Appendix G, JEPES Installation Procedure, for information on increasing the PC's conventional memory.
11. Unidentified Processing Error
 Internal error message and should not normally be issued.

Ada Errors:

1. Program Error
 Internal message and should not normally be issued.
2. Constraint Error
 Value is out-of-range. Check input data.

ORACLE Database Errors:

1. **Cannot Return Number of Rows**
Error returning the number of rows from a JEPES table. Use SQL*Plus to determine the number of rows in the table.
2. **General Conversion Error**
Error accessing the data in the JEPES ORACLE database. Check the data in the table.
3. **Invalid Open Parameter**
Invalid data in a JEPES table.
4. **ORA-XXXX - ORACLE Database Error**
Error accessing JEPES ORACLE database. Refer to the ORACLE Error Messages and Codes Manual.
5. **Table Has Changed**
A JEPES table's description; i.e., table's rows and columns, has changed. Use SQL*Plus to verify that the columns and rows had not changed.
6. **View Already Open**
Error accessing the data in the JEPES ORACLE database. Exit JEPES and reinitialize by following the steps in Paragraph 3.1.

SPECIFIC ERRORS

Data Errors:

1. **Cannot Adjust Daily Manhours Available for Class X Start Day XXX End Day XXX**
Invalid value for Max Avail Manhours Per Day in Engineering_Support table.
2. **Cannot Adjust Quantity Available for Class X**
Error determining Facility Quantity using Engineering_Support table. This error occurs when applying host nation resources to unscheduled projects.
3. **Computation Error While Processing BCN XX**
Error accessing the Base_Complex table. Verify data in the table.
4. **Computation Error While Processing Region XX**
Error accessing the Climatic_Factor table. Verify data in the table.
5. **Computation Error While Processing Service X and Day XXX**
Error determining engineering capabilities. Verify service and day in the following tables: Engineer_Unit_Capability table, Phase_In_Efficiency table, Attrition_Factor table, and Climatic_Factor table.

6. Component Size Cannot Be Zero
 Service component size in Component table is set to zero. Update service component size in Component table to a value greater than zero.
7. Constraint Error Raised While Processing Day XXX
 Error determining engineering capabilities. Verify data in Deployed_Eng_Sensitive_Unit table and Engineering_Unit_Capability table.
8. Constraint Error Raised While Processing Day XXX and Phase-In Day XXX
 Error determining engineering capabilities. Verify input added to Engineer Phase-In Efficiency in Requirements Analysis function.
9. Constraint Error While Initializing Engineers Array
 Error attempting to initialize the actual hours horizontal, actual hours vertical, and actual hours other in the Construction_Capability table. Verify data in the table.
10. Constraint Error While Processing Region XX
 Error accessing the Climatic_Factor table. Verify data in the table.
11. Constraint Error While Retrieving from Engineers Array
 Error accessing engineer information from Construction_Capability table.
12. Construction Policy Code Not Found for Base Complex Nbr: XX and Facility Category Code: XXXX
 Invalid Construction Policy code in Base_Facility_Construction_Policy table.
13. Data Are Not Resident for BCN = XX
 BCN is not the current BCN in Project table.
14. Error Applying Attrition for Day XXX and Service X
 Error applying attrition per day for each engineer skill. Check time periods and percentages for assessing engineer attrition entered at the Engineer Attrition screen.
15. Error Calculating Attrition Dates
 Error determining the first and last day to assess personnel attrition. Check time periods entered at the Engineer Attrition screen.
16. Error Computing Loss for Day XXX and Service X
 Error determining the capability loss per day for each engineer skill. Check time periods and percentages for engineer attrition entered at the Engineer Attrition screen.
17. Error Computing Replacement for Day XXX and Service X
 Error determining the personnel replacement per day for each engineer skill. Check time periods and percentages for engineer attrition entered at the Engineer Attrition Screen.
18. Facility Category Code Not Found XXXX
 Facility Category code not found in Facility_Category table.

19. Invalid Asset Source Indicator
Asset source needs to be determined. Asset source can be U.S. host nation and/or facility substitution. Refer to Paragraph 5.3.2 for new OPLAN, and follow the instructions if this is a new OPLAN. Otherwise, try one of the following two solutions. While in JEPES go to the Apply Assets screen and enter the assets to apply (U.S. Facility Assets, HN Facility Assets, Facility Asset Substitution). Press F5 to store parameters only and then rerun the job. The other solution is to update Asset Source Indicator in the Operation table.
20. Invalid Austere Component Value: X
Invalid austere component in Component table.
21. Invalid Construction Policy Code Value
Invalid Construction Policy code Value in Base_Complex table or Base_Facility_Construction_Policy table (1-4 are valid codes). See Appendix H, Table H-2.
22. Internal Error - Position Exceeds Last Facility
Error accessing Facility_Category table.
23. Invalid Facility Priority
Invalid facility priority in Project table ('C,' 'E,' or 'N' are valid priorities). See Appendix H, Table H-5.
24. Invalid Force Utilization
Engineering force utilization indicator needs to be determined. Refer to Paragraph 5.3.2 for new OPLAN and follow the instructions if this is a new OPLAN. Otherwise, try one of the following two solutions. While in JEPES go to the Eng Force Utilization option in Requirements Analysis and enter whether to use Regional or Base Only. The other solution is to update engineering force utilization indicator in Operation table.
25. Invalid Fractionable Value: X
Invalid Fractionable in Component table ('W,' or 'F' are valid values). See Appendix H, Table H-6.
26. Invalid LSA Code
Invalid LSA Code in LSA_Export table. See Appendix H, Table H-8.
27. Invalid Percent To Be Shipped Data
Pct Shipped in Facility Category table is invalid.
28. Invalid Planning Factor Value: XXXXXX
Invalid planning factor type in General_Planning_Factor table. See Appendix H, Table H-9.

29. Invalid Priority
Invalid facility priority in Plan_Facility_Construction_Policy table ('C,' 'E,' or 'N' are valid priorities). See Appendix H, Table H-5.
30. Invalid Project Class
Invalid facility project class in Plan_Facility_Construction_Policy table or Project table. See Appendix H, Table H-7.
31. Invalid Self Sustainability Code Value: X
Invalid Self Sustainability code in Unit_Type table ('C,' 'V,' or 'N' are valid codes). See Appendix H.
32. Invalid Service Code
Invalid Service code in Construction_Capability table, Deployed_Eng_Sensitive_Unit table, Equipment_Planning_Factor table, Facility_Requirement table, General_Planning_Factor table, Project table, Unit_Equipment table or Unit_Type table. See Appendix H, Table H-14.
33. Invalid Service Code Value: X
Invalid Service code in Component table. See Appendix H, Table H-14.
34. Invalid Using Service Code: X
Invalid using service in Planner_Input_Requirement table. See Appendix H, Table H-14.
35. Invalid Value for Base Owner
Invalid value in Base_Complex table.
36. Invalid Value in Rear Echelon Storage Base
Verify the rear echelon storage bases in the Backup_Supply table.
37. Invalid Value in Support Structure Index
Verify the support structure index in the JEPES table that was accessed. Support structure index is in the tables: Backup_Supply, Equipment_Planning_Factor and General_Planning_Factor.
38. Maximum Number of Equipment Planning Factor Rows is : XX. Current Number of Equipment Planning Factor Rows is : XXX
Number of records in Equipment_Planning table exceeds 75.
39. Maximum Number of Facility Component Rows is = XX. Current Number of Facility Component Rows = 40.
Facility_Component table contains more than 40 records. Reduce number of records in table.

- 40. Maximum Number of General Planning Factor Rows is : XX. Current Number of General Planning Factor Rows is : XXX
Number of records in General_Planning table exceeds 75.
- 41. Negative Climatic Factor
Negative Climatic Adjustment in Climatic_Factor table.
- 42. No Components Existed for the Component Codes Given
No component record exists for a given service code and service component code.
- 43. No Engineering Capability Data at BCN XX
No construction capability record for that BCN.
- 44. No Engineering Units Exist
Error attempting to initialize the actual hours horizontal, actual hours vertical, and actual hours other in the Construction_Capability table. Verify data in the table.
- 45. No Facilities for UTC
Error accessing records Facility_Requirement table. Table may be empty.
- 46. No Facility Category Records Found
No records exist in Facility_Category table.
- 47. No LOGSAFE Records Found
No records found in LOGSAFE_Interface table.
- 48. No LSA Records Found
No records found in LSA_Export table.
- 49. No Operations Records in Database
No records exist in the Operation table.
- 50. Null Constructing Service Is Not Allowed
Constructing service in Project table, Scheduled_Project table, or Unscheduled_Project table cannot be set to null.
- 51. Null Using Service Is Not Allowed
Using service in Project table, Scheduled_Project table, or Unscheduled_Project table cannot be set to null.
- 52. Processing Error While Processing Service X and Day XXX
Error determining engineering capabilities. Verify the following tables:
Engineer_Unit_Capability table, Phase_In_Efficiency table, Attrition_Factor table, and Climatic_Factor table.
- 53. Specified Component Not Found
No component record exists for a given service code and service component code.

54. Too Many Engineering Unit Capability Records -- Maximum is 150
Engineering_Unit_Capability table contains too many records for the Ada code to handle.
Reduce record size to 150.
55. Undefined Processing Error Initializing Base Data for BCN
Error accessing the Base_Complex table. Verify data in the table.
56. Undefined Processing Error While Processing Day XXX
Error determining engineering capabilities. Verify data in Deployed_Eng_Sensitive_Unit
table and Engineering_Unit_Capability table.
57. Undefined Processing Error While Processing Day XXX and Phase-In Day XXX
Error determining engineering capabilities. Verify input added to Engineer Phase-In
Efficiency in Requirements Analysis function.
58. Undefined Processing Error While Processing Region XX
Error accessing the Climatic_Factor table. Verify data in the table.

ORACLE Database Errors:

1. ORA-0001 - Duplicate Value In Index
Attempting to insert a record that has the same unique key as an existing record. Refer to
Oracle Error Messages Codes Manual for further assistance.

Algorithmic Errors:

1. Aggregate Daily Manhours Required > Maximum
Constraint error when aggregating the horizontal, vertical, and other manhours in the
Unscheduled_Project table.
2. Aggregate Total Manhours Required > Maximum
Constraint error when calculating the total manhours required for applying the host nation
resources.
3. Bases Within Region > Maximum Allowed
There are more than 99 bases in a region.
4. Computation Error - Aggregate Total Manhours Greater Than Allowable Maximum
Constraint error when determining the available total manhours for applying U.S. resources.
5. Computation Error for BCN: XX, Facility Category Code: XXXX, Facility Project Class: X and
Service Code: X
Constraint/numeric error when applying assets.
6. Computation Error Substituting
Constraint error when calculating substitution hours.
7. Computation Error While Applying Resources

Constraint error when applying resources to required manhours.

8. Computation Error While Calculating Total Manhours
Constraint error when determining the available total manhours for applying U.S. resources.
9. Constraint Error Assigning the Project Record BCN: XX, Project Nbr: XXXXX
Constraint error when assigning a war damage record.
10. Constraint Error BCN: XX, Project Nbr: XXXXX
Constraint error when applying resources to a war damage record.
11. Constraint Error Encountered. Unscheduled Counter = XX
Constraint error while attempting to apply U.S. resources.
12. Constraint Error While Calculating On Day
Constraint error when scheduling construction requirements.
13. Constraint Error While Calculating Requirements Numbers * Ratio
Constraint error occurred while applying host nation and contractor resources to generated requirements.
14. Constraint Error While Initializing Dates
Constraint error when scheduling construction requirements.
15. Contributing Hours > Contributing Engineering Capability
Contributing hours is greater than the contributing engineers capability when applying skill substitution.
16. Deficient Skill Required > What Contributing Skill Can Provide
Error applying partial manhours to a requirement for a full skill substitution or error applying full manhours for a requirement when fulfilling a partial skill substitution.
17. For Deficient Skill, Remaining Required Manhours < 0.1
Remaining current day required manhours must be > 0.1 when applying skill substitution.
18. Ratio Calculation Failed
Constraint error when determining the ratio of the maximum facility quantity provided by the host nation/contractor OVER the amount of facility construction required. The facility quantity and manhours available is in the Engineering_Support table and facility and manhours required are in Unscheduled_Project table.